YELLOW COPY

APR-9 1998

APR - 9 1998

MEMORANDUM

SUBJECT: Review of Washington Request to Use Pyridate to control broadleaf weeds (i.e., common lambsquarters, kochia, nightshade, common mallow) in garbanzo(chickpeas) beans in Washington, Oregon, and Idaho. [98-WA-31] [DP Barcodes D244666, D244651]

FROM: Frank I. Hernandez, Economist
Economic Analysis Branch
Biological and Economic Analysis Division (7503W)

James G. Saulmon, Botanist
Herbicide and Insecticide Branch
Biological and Economic Analysis Division (7503W)

TO: Jackie Mosby-Gwaltney/Robert Forrest
Registration Support Branch
Registration Division (7505C)

We have reviewed the request from WA for an emergency exemption to use Pyridate to control broadleaf weeds in garbanzo (chickpeas) beans to be grown in ID OR, and WA. According to Gareau (1998), the situations and growing conditions in OR and WA are similar to those of ID. Gareau (1998) noted that there has not been much change in growing conditions since BEAD last reviewed this request in 1997 (97WA0034 and 97OR0031, memorandum dated 07/14/97). We find the situations for growing chickpeas in OR, WA, and ID to be non-routine based on the similarity of growing conditions in Idaho to those of Oregon and Washington.

According to Gareau (1998), yield losses in ID, OR, and WA due to broadleaf weed pressure are expected to range from 50% to 60%. No new alternative herbicides have been registered since the last review in 1997. No new herbicides are currently registered for postemergence use on garbanzo (chickpeas) beans. Chickpea growers in ID, OR, and WA would experience significant economic losses without the use of pyridate to control broadleaf weeds.

(1)

CONCURRENCES

SYMBOL	7503W	7503W	7503W	7503W			
SURNAME	Saulmon	Hernandez	Kutt	HERZI			
DATE	4/9/98	4/9/98	4/9/98	4/9/98			

EPA FORM 1320-1(1/90)

Official File Copy

Biological Aspects

Historically, Michael Yanchulis has reviewed the following previous requests (97WA0034 and 97OR0031) to use pyridate to control broadleaf weeds in garbanzo (chickpeas) beans and found them to be non-routine. We believe that the situation has not changed appreciably since BEAD last reviewed this request in 1997.

Economic Aspects

Under the requested 1998 exemption for Idaho, Oregon, and Washington, total usage of pyridate on chickpeas is projected to be less than 23,400 lbs. a.i.. About 13,000 acres of chickpeas planted in those states is estimated to be treated with the herbicide. The rate of application would be 0.9 lb. a.i. per treated acre, maximum of 2 applications.

As discussed above, there are no currently registered postemergence herbicides to effectively control broadleaf weeds. Significant reductions in chickpea yields are expected using preemergence herbicides like pendimethalin or ethalfluralin to control those weeds. Chickpea growers in those states would experience significant economic losses in 1998 without pyridate.

With the tristate exemption in place for 1998, the income (yield times price minus cost) of chickpea growers is projected to remain within its range of fluctuation over the last five-year period. Income for 1994 was considered an outlier. On the 13,000 acres treated, assuming a yield of 10.65 cwt per acre and a price of $33.59 per cwt, a chickpea crop valued at about $4.6 million, and generating some $1.9 million in income, is projected. (See table below.)

1998 WA Chickpeas: With and Without Pyridate.

Year	Yield (cwt/A)	Price ($/cwt)	Value ($/A)	Cost ($/A)	Income ($/A)
1993	8.35	33.60	280.56	211.38	69.18
1994(*)	5.13	24.43	125.33	211.38	- 86.05
1995	13.69	40.00	547.60	211.38	336.22
1996	6.66	32.00	213.12	211.38	1.74
1997	13.91	28.00	389.48	211.38	178.10
Avg.	10.65	33.59	357.69	211.38	146.31
Breakeven	6.40	33.59	214.86	213.12	1.74

(*) Income Outlier.
Source: Data submitted by the State of Washington.

In the absence of pyridate, expected yield losses with the next best alternative controls could be higher than the breakeven point of about 40 percent. The resulting income of much less than $1 million on the 13,000 acres treated would create a significant economic impact for producers of chickpeas in those states this year.

REFERENCES

Gareau, R. 1998. USA Dry Pea and Lentil Council, 5071 Hwy 8 W, Moscow, ID. Phone: 208-882-3023; Fax: 208-882-6406. Telephone communication on 4/6/98 and fax received on 4/7/98 by James G. Saulmon at USEPA.

TO:

Please respond the questions and fax your response within one day to Jim Saulmon [Phone:703-308-8126; fax: 703-309-8090]

Questions regarding Sect_18 [98-WA-31]

1. Have growing conditions in Oregon and Washington for garbonzo (chickpeas) beans changed since the last Sect. 18 request for pyridate in 1997?

2. Are growing conditions for garbanzo (chickpeas) beans in Oregon and Washington similar to those of Idaho.

3. What is the expected yield loss percentage range in Oregon and in Washington for garbanzo (chickpeas) beans without the use of pyridate?

4. What is the expected yield loss percentage range in Idaho for garbanzo (chickpeas) without the use of pyridate.

5. Regarding this sect 18, will Oregon's data suffice for Washington and Idaho as well?

6. Which broadleaf weeds are targeted for Oregon, Washington, and Idaho?
   a. common lambsquarters
   b. kochia
   c. nightshade
   d. common mallow